

## **ANNEX A**

### **Draft Strategic Exception Test**

Confidential

**Newhaven  
Strategic Network  
Masterplan Options  
Strategic Exception Test**



For

Newhaven Strategic Network

Project No:

10000

June 2010

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**Document History and Status**

Revision	Date	Purpose/Status	Author	File Ref	Check	Review
F2	14/05/2010	Final	JB	JBjb-10000- June10-Exception Test F2.doc	SRB	DPMI

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**Document Details**

<b>Last saved</b>	08/04/2010 15:56
<b>Path</b>	JBjb-10000-June10-Exception Test F2.doc
<b>Author</b>	JB
<b>Project Partner</b>	DPMI
<b>Project Number</b>	10000
<b>Project Name</b>	Newhaven Strategic Network

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## 1.0 INTRODUCTION

- 1.1. The Newhaven Strategic Network (NSN) is a partnership of public, community and private organisations established to ensure the ongoing regeneration of the town of Newhaven, East Sussex. The partnership includes, amongst others, East Sussex County Council, Lewes District Council, Newhaven Town Council, and South East England Development Agency (SEEDA).
- 1.2. The town of Newhaven and the general development area covered by the Masterplan is shown on Figure 1 below.
- 1.3. Potential development sites and Masterplan options have been formulated for the regeneration of the town and are presented in a report: 'Physical Development Vision for Newhaven Stage 2', prepared by BBP Regeneration.

Figure 1: Aerial Photo



Image provided by Lewes District Council © Getmapping.com 2008/2009

- 1.4. This report supports the Physical Development Vision and brings together an assessment of the flood risk within the town of Newhaven, a review of the masterplan development options, and an assessment of the options in terms of the Exception Test as outlined in PPS 25.
- 1.5. Lewes District Council is currently preparing and applying the Sequential Test to the District, including the town of Newhaven, which will assess land available for development in terms of flood risk. This assessment is not yet complete and a publication date has not been provided. However, we have assumed that the results of the Sequential Test process will be positive for Newhaven as part of this report in order to enable the strategic application of the Exception Test for sites within Newhaven to facilitate regeneration planning and to demonstrate the potential delivery of the Masterplan area.
- 1.6. The purpose of this report is to outline a detailed flood management strategy that, if followed, would allow the public and private sectors to deliver a detailed Exception Test for the Physical Development Vision once the Sequential Test has been completed.
- 1.7. Lewes District Council has prepared a Strategic Flood Risk Assessment covering the District, including the town of Newhaven which sets out the risks to the town and delineates the areas at risk of flooding as defined by the Environment Agency.
- 1.8. Large parts of the District of Lewes and the town of Newhaven are located in areas at risk of flooding as shown by the Environment Agency Flood Maps and the SFRA for the area. The Sequential Test to be undertaken by LDC will establish to what extent development will be required in areas of flood risk in order to meet targets set within the South East Plan.
- 1.9. Potential development sites within Newhaven have been identified, and this report outlines the Strategic Exception Test for those sites and assesses potential options to ensure the safety of potential development in terms of safe access and egress in accordance with current guidance set out in PPS 25.
- 1.10. IT IS NOT INTENDED THAT THIS DOCUMENT FORMS AN APPROVED FINAL EXCEPTION TEST FOR THE POSSIBLE DEVELOPMENT SITES AND CARRIES NO WARRANTY OR APPROVAL WITHOUT THE DEFINITIVE SEQUENTIAL TEST BEING PREPARED BY LEWES DISTRICT COUNCIL. This document has however been agreed with the Environment Agency as a 'Strategic Exception Test' that sets out the principle of safe development within the context of the Newhaven Masterplan. Future development in line with the

recommendations within this report will be required to demonstrate compliance through analytical modelling of the solutions presented. It is in this context that the views of Environment Agency have been sought on the report and its findings.

- 1.11. It should be noted that the analytical findings of the SFRA produced by LDC in relation to the functional floodplain (Flood Zone 3b) around Newhaven have since been questioned by the Environment Agency. Whilst this report uses the findings of the SFRA in this regard without question or amendment, further analytical modelling to accurately identify the boundary of the functional floodplain will be required as part of any development specific FRA.



**2.0 PPS 25 REQUIREMENTS**

2.1. Planning Policy Statement 25; Development and Flood Risk (PPS 25) describes Environment Agency Flood Zones associated with fluvial and tidal flooding:

- Flood Zone 1: Low Probability – Land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
- Flood Zone 2: Medium Probability – Land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% - 0.1%), or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (.05% - 0.1%) in any year.
- Flood Zone 3a: High Probability – Land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of sea flooding (>0.5%) in any year.
- Flood Zone 3b: The Functional Floodplain – Land where water has to flow or be stored in times of flood. Generally land which would flood with an annual probability of 1 in 20 (5%) or greater in any year.

2.2. Table D.2 in Annex D of PPS 25, reproduced below, describes the vulnerability classification of different development types.

Essential Infrastructure	<ul style="list-style-type: none"> <li>• Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.</li> <li>• Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood.</li> <li>• Wind turbines.</li> </ul>
Highly Vulnerable	<ul style="list-style-type: none"> <li>• Police stations, Ambulance stations and Fire stations and Command Centres and telecommunications installations required to be operational during flooding.</li> <li>• Emergency dispersal points.</li> <li>• Basement dwellings.</li> <li>• Caravans, mobile homes and park homes intended for permanent residential use.</li> </ul>

	<ul style="list-style-type: none"> <li>• Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure').</li> </ul>
More Vulnerable	<ul style="list-style-type: none"> <li>• Hospitals.</li> <li>• Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.</li> <li>• Buildings used for: dwelling houses; student halls of residence; drinking establishments; nightclubs; and hotels.</li> <li>• Non-residential uses for health services, nurseries and educational establishments.</li> <li>• Landfill and sites used for waste management facilities for hazardous waste.</li> <li>• Sites used for holiday or short-let caravans and camping, <b>subject to a specific warning and evacuation plan.</b></li> </ul>
Less Vulnerable	<ul style="list-style-type: none"> <li>• Police, ambulance and fire stations which are <b>not</b> required to be operational during flooding.</li> <li>• Buildings used for: shops; financial, professional and other services; restaurants and cafes; hot food takeaways; offices; general industry; storage and distribution; non-residential institutions not included in 'more vulnerable'; and assembly and leisure.</li> <li>• Land and buildings used for agriculture and forestry.</li> <li>• Waste treatment (except landfill and hazardous waste facilities).</li> <li>• Minerals working and processing (except for sand and gravel working).</li> <li>• Water treatment works which do <b>not</b> need to remain operational during times of flood.</li> <li>• Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place).</li> </ul>
Water Compatible	<ul style="list-style-type: none"> <li>• Flood control infrastructure.</li> <li>• Water transmission infrastructure and pumping stations.</li> <li>• Sewage transmission infrastructure and pumping stations.</li> <li>• Sand and gravel workings.</li> <li>• Docks, marinas and wharves.</li> <li>• Navigation facilities.</li> </ul>

	<ul style="list-style-type: none"><li>• MOD defence installations.</li><li>• Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.</li><li>• Water-based recreation (excluding sleeping accommodation).</li><li>• Lifeguard and coastguard stations.</li><li>• Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.</li><li>• Essential ancillary sleeping or residential accommodation for staff required by uses in this category, <b>subject to a specific warning and evacuation plan.</b></li></ul>
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- 2.3. Where development is located in Flood Zone 1, all vulnerability classifications are considered appropriate. Where development is located in Flood Zones 2 and 3, depending on the type of development, the Sequential and Exception Tests may be applicable in order to demonstrate the suitability for development at that location.

#### The Sequential Test

- 2.4. Planning Policy Statement 25: Development and Flood Risk Practice Guide defines the Sequential Test as:

‘...a decision making tool designed to ensure that sites at little or no risk of flooding are developed in preference to areas at higher risk.’ (Para 4.12)

- 2.5. The Sequential Test, which should be prepared by the Local Planning Authority as part of their Local Development Framework, will identify land and sites appropriate for development located within Flood Zone 1. Where there is insufficient land availability within Flood Zone 1, the Sequential Test will propose sites or areas within Flood Zones 2 and 3 respectively.

- 2.6. PPS 25 paragraph D1 states that ‘The risk based Sequential Test should be applied at all stages of planning. Its aim is to steer new development to areas at the lowest probability of flooding.’

#### The Exception Test

- 2.7. PPS 25 defines the Exception Test and states that:

'The Exception Test should be applied by decision makers only after the Sequential Test has been applied.'

- 2.8. In exceptional circumstances, there may be valid reasons for a development type which is not compatible with the level of flood risk at a particular site to be considered. In these circumstances the LPA or developer must demonstrate that the development passes all elements of the Exception test.
- 2.9. Application of the Exception test comprises three parts, all of which must be passed and proven in order for development to be justified where necessary as defined by Table D.3 of PPS25. For the Exception Test to be passed:
- a) it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a SFRA where one has been prepared.
  - b) The development should be located on developable, previously developed land.
  - c) A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and, where possible will reduce flood risk overall.

#### **Lewes District**

- 2.10. The urban areas of the District of Lewes are largely located within Flood Zones 2 and 3. Newhaven itself is located at the mouth of the River Ouse and is at risk of flooding as a result of both fluvial and tidal sources. This results in pressure on the LPA to permit development on land at risk of flooding in order to facilitate the continuing regeneration of the town.
- 2.11. The towns of Lewes and Newhaven, the largest urban areas in the district, have large areas of land considered to be located within flood zone 2 and 3 and new development may need to be considered on land assessed as being at risk of flooding.
- 2.12. Lewes District Council (LDC) is currently undertaking a Sequential Test and applying the principles of PPS 25 to all potential development sites within the LPA boundary. The outcomes of the LDC Sequential Test are not yet available, however in order to enable the application of the Exception Test for the Newhaven Masterplan sites it has been

anticipated that the Sequential Test will conclude that not all new housing provision for the region will be accommodated within areas of Flood Zone 1.

### 3.0 FLOOD RISK IN NEWHAVEN

- 3.1. The masterplan options presented within Section 4.0 of this report are located across the town of Newhaven and cover sites both east and west of the River Ouse
- 3.2. The sites therefore span each of the Flood Zones as defined by the Environment Agency and are subject to varying risks associated with all forms of flooding.

#### Environment Agency Flood Zones

- 3.3. The Environment Agency Flood Zones are shown on drawing GIS001 contained within Appendix A.
- 3.4. The main urban areas of the town occupy the areas of Flood Zone 1 to the west of the River Ouse. Along the course of the river and the low lying land to the east is classified as Flood Zone 3 and is liable to substantial flooding from fluvial and tidal sources.

#### Catchment Flood Management Plan

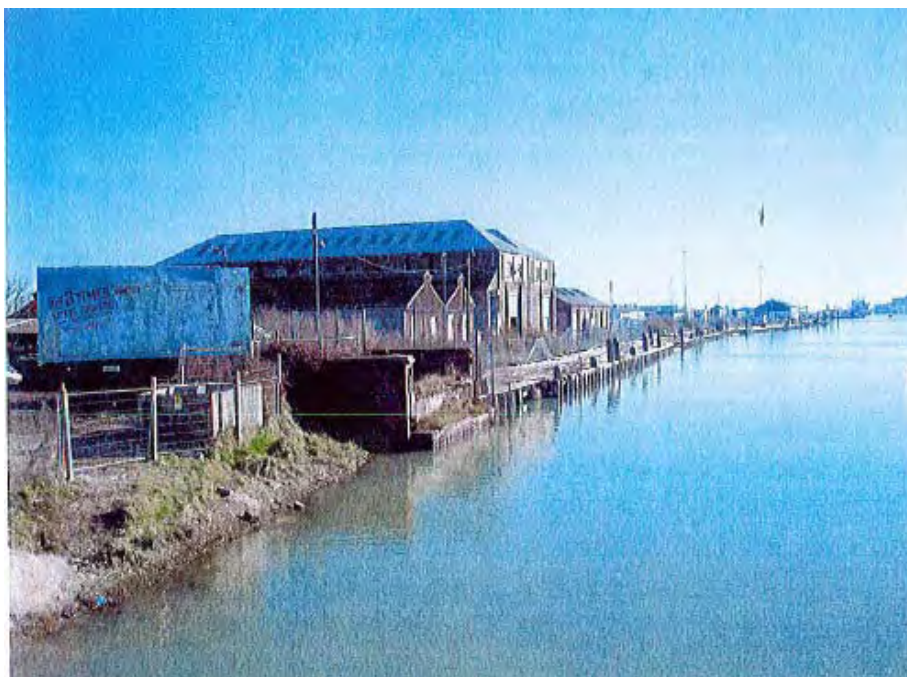
- 3.5. The River Ouse CFMP (published in September 2008) defines fluvial flooding through Lewes and Newhaven, identifies the risk of flooding through urban areas, and presents current and future policies for dealing with flood risk in terms of provision of hard defences.
- 3.6. The CFMP covers fluvial flooding through Lewes and Newhaven, and in the area between the two towns, but does not address tidal flood risk which is assumed to be covered for the area within the South Downs Shoreline Management Plan (see below).
- 3.7. The CFMP identifies a history of fluvial, tidal, surface, and groundwater flooding along length of the Ouse.
- 3.8. The area of Newhaven is identified as being at medium risk from fluvial flood events alone, with the consequences of predicted at approximately £1million in damages for a 1% (1 in 100) fluvial flood event.

- 3.9. Fluvial flooding is shown to occur upstream, overtopping the banks in the largely rural area between Lewes and Newhaven, and progress overland in a southerly direction resulting large scale inundation of the Eastbank of Newhaven and Denton.
- 3.10. The 'Fluvial Flood Risk Management Policy' for Newhaven is identified as Policy 4, 'Take further action to sustain current scale of flood risk into the future (responding to potential increases in risk).'
- 3.11. However upstream of Newhaven in the rural area south of Lewes the policy is to 'Take further action to increase the frequency of flooding', which would promote the frequency of overland flows potentially inundating Newhaven as a result of banks overtopping upstream.
- 3.12. As a result of this identified policy for the area, Newhaven is identified as an area for increased investment in response to climate change in order to provide flood defences against fluvial flooding of the River Ouse.

#### **Shoreline Management Plan**

- 3.13. The South Downs SMP (2006/07) defines the tidal flood risk to the south coast, including the area of Newhaven. Within the document two policy areas are identified within Newhaven, these are Newhaven Harbour & Ouse Valley, and Tide Mills to Newhaven Harbour.
- 3.14. Despite its title the SMP only covers tidal risk along the shoreline to the mouth of the River Ouse and therefore does not consider tidal flooding through the port of Newhaven along the River Ouse. There is therefore, in our view, a gap in the flood management assessment and appraisal set out by the combination of the SMP and CFMP.
- 3.15. The long term flood defence strategy for the Newhaven Harbour & Ouse Valley area has been to 'Hold the Line' in order to protect existing assets, but this is interpreted within the SMP as covering only the beach and not the tidal flood defences through Newhaven itself. The SMP proposes to extend this policy into the future whilst adapting to changing pressures on land use and from climate change.
- 3.16. The existing tidal flood defences through the port of Newhaven are currently limited. The banks of the River Ouse are not constructed flood defence infrastructure and do not provide any substantive protection to the low lying land behind. The photograph shown

below, taken on a typical spring tide, shows the current lack of freeboard along North Quay. Typically North Quay lies at a level between 4.2m and 4.3m AOD. The current 1 in 200 yr flood level is 4.85m, and with climate change is estimated to be 6.05m AOD. The SFRA modelling shows that without substantial investment in flood defences and if tidal flooding overtops the banks of the Ouse through the port the whole of the Eastbank area of Newhaven and Denton is likely to become inundated by flood water. Similarly if fluvial flooding occurs upstream as part of a managed retreat policy the area will also be at threat from fluvial flooding, although at a lower level of risk.



- 3.17. The current flood defence strategy for the Tide Mills to Newhaven Harbour area is 'No Active Intervention', due to the area being low lying and containing no assets. The SMP identifies a future policy of 'Managed Realignment' at Tide Mills towards Seaford and proposes a wider, more natural shingle beach further inland than present which would act as a natural flood defence. **There are no policies set out within the SMP for management of the tidal defences within Newhaven itself.**

### Surface Water Flooding

- 3.18. CampbellReith have prepared a supplementary report to provide an initial investigation into the surface water networks on the Eastbank of Newhaven. The purpose of the Surface Water Study was to gain an understanding and appreciation of the surface water drainage within the potential development area, and to inform the Exception Test in order



that surface water can be considered and the impacts of potential development be minimised.

- 3.19. A network of culverts and ditches exists on the Eastbank of Newhaven and potential development is likely to impact on this network and the outfalls into the river. Development proposals will need to include drainage strategies which mitigate and compensate for the building over of the existing network.
- 3.20. Enquiries have been made of East Sussex County Council with respect to highway flooding incidents throughout the town. Feedback received from ESCC is included within the Surface Water Study Report. Enquiries have also been made of Southern Water with respect to incidents of sewer flooding and surcharging throughout the town. Feedback received from Southern Water is included within the Surface Water Study Report.
- 3.21. The Surface Water Study has been used to inform the development of the strategies outlined in Section 6.0 below and will be of use in developing Site Specific Flood Risk Assessments for developments.

#### **Proposed Flood Wall**

- 3.22. The SFRA and CFMP introduce the concept of a flood wall to the north of Newhaven to protect the town from major flood events. The concept is based on the fact that the majority of fluvial flooding modelled across Newhaven occurs as a result of flooding from the River Ouse further north.
- 3.23. The principle of the flood wall is to stop and hold back the out of bank flood flow north of the town and, if introduced, could substantially reduce fluvial flooding risk in the town.
- 3.24. The Environment Agency have confirmed that the flood wall remains a concept as it would cross both the railway line from Lewes to Seaford, and the A26. Whilst the A26 could be re-aligned to rise over the wall the railway line has presented greater problems.
- 3.25. Three potential solutions are believed to have been investigated by the Environment Agency and have been discussed during a series of meetings throughout the preparation of this Strategic Exception Test document:

- a) Raise the railway; the railway would be raised to pass over the flood wall. This would require a substantial railway engineering undertaking with large lengths of track being raised and re-laid.
  - b) De-mountable flood wall; the permanent flood wall would stop either side of the railway line and a de-mountable panel would be designed to infill across the railway in the lead up to a critical storm event. It is understood that such proposals have been rejected by Network Rail on the grounds of rail safety.
  - c) Terminate the railway line at the flood wall; the most radical of the solutions and would see the towns of Newhaven, Bishopstone, and Seaford lose their railway service with a new station constructed north of the flood wall.
- 3.26. Further consideration of this proposal and discussion between key stakeholders to find a viable solution to the flood wall proposal would substantially increase the viability and safety, in terms of flood risk, of future development in Newhaven.
- 3.27. This report does not consider the impact of the proposed wall within its options but recognises the positive impacts that the wall could provide to Newhaven. As a result of the lack of certainty on the EA's current proposals the wall has been largely ignored in the development of flood risk strategies and the Strategic Exception Test which have been developed on the basis that fluvial, and potentially tidal, flooding will occur to the north and that the railway, lying at 2.9 to 3.0m AOD, will flood.

### **Strategic Flood Risk Assessment**

- 3.28. A SFRA has been prepared in two stages by consultants on behalf of Lewes District Council.
- The Stage 1 study covers all forms of flooding within the District and provides a general overview of the flood mechanisms and potential risks across the District.
  - The Stage 2 study provides further detail of the flood risk areas and quantifies the level of risk through the use of hydrological modelling of the River Ouse through Lewes and Newhaven. The area of the east bank of the Ouse in Newhaven is modelled on the presumption that it will be defended in the future as part of an Eastbank Development Plan. This shows a collective approach between LDC and the EA to forward planning, and it is the results of this modelling that has referred to

throughout this Strategic Exception Test. Appendix A shows the areas of Newhaven assumed to be raised within the SFRA modelling process.

- 3.29. Within the SFRA various flood events have been assessed and flood extents have been mapped, showing areas at risk during varying return period fluvial and tidal flood events.
- 3.30. A number of flood outlines are shown in the study and identify areas within Newhaven to be at risk from tidal flooding due to overtopping of flood defences along the River Ouse, and also as a result of fluvial flooding upstream of the town, causing overland flow along the Eastbank of the river into the low lying area of the town. The SFRA also contains mapping to show the effects of the proposed EA flood protection barrier outlined above.
- 3.31. The Eastbank of Newhaven is shown to flood during the modelled 20 yr fluvial + 20 yr tidal flood, 2 yr fluvial + 200 yr tidal flood, 2 yr fluvial + 1000 yr tidal flood and the 200 yr tidal flood. Plots of these flood outlines from these combined events are reproduced from the SFRA in Appendix A.
- 3.32. With the existing flood defences, flood depths within the Eastbank area are shown up to 5.5m AOD during the 1 in 200 yr + cc tidal event, with potential high flow velocities adjacent to the banks of the river.
- 3.33. The SFRA also provides details of a proposed Environment Agency flood protection barrier towards the north of Newhaven which would prevent overland fluvial flows progressing south towards the masterplan study area. Flood outline maps have been provided within the SFRA to show the effects of the proposed barrier which would significantly reduce the risk of fluvial flooding to the masterplan development sites. This is discussed in more detail below.
- 3.34. The 'Raised Defences' modelling includes the potential EA flood protection barrier to the north of the Eastbank area, which prevents fluvial flooding and overland flows affecting the area. Land raising of the Eastbank is also included in the modelling to protect the area from tidal flooding. With these raised defences the area is predictably not shown to flood in any of the modelled events. Plots of these flood outlines are also reproduced from the SFRA in Appendix A.
- 3.35. The SFRA modelling shows that both fluvial and tidal flooding could potentially affect the site. However the EA flood protection barrier would prevent fluvial and overland flows

affecting the area. Therefore tidal flooding would be the major flood mechanism which would need to be mitigated at the masterplan sites.

- 3.36. Land raising, as shown within the SFRA modelling would prevent tidal flooding of the Eastbank area and protect the low lying areas in Denton.
- 3.37. The strategies within this Strategic Exception Test have however been proposed based on fluvial and tidal flooding affecting the area.
- 3.38. PPS 25 (Annex D, Table D.1) defines the functional floodplain as Flood Zone 3b. The key part of the definition is 'land where water has to flow or be stored in times of flood.' The functional floodplain includes water conveyance routes and storage areas which are sometimes referred to as washlands. The PPS 25 Practice Guide explains that it is the Local Planning Authorities role to identify areas of functional floodplain through the SFRA process and where it is not identified, agree collaborative discussions between developers, LPA's and the EA. Paragraph 4.81 makes it clear that the definition in PPS 25 allows flexibility to make allowances for local circumstances and should not be defined on rigid probability parameters and makes it clear that areas that are prevented from flooding by infrastructure or building will not normally be defined as part of the functional floodplain, and that developed areas will also not be considered part of the functional floodplain.
- 3.39. The Stage 1 SFRA outlines a functional floodplain in drawing 002/S12 which covers most of the Eastbank of Newhaven including large parts of Denton. This is clearly inconsistent with the definition above. The Stage 2 SFRA mapping results are then shown on figure 010/S12 which shows a more realistic functional floodplain consisting of what are generally dockside areas although does include some areas of North Quay.
- 3.40. The development strategies developed within this report have been based on the functional floodplain shown in the Stage 2 SFRA and are consistent with the aims of avoidance of development in areas of functional floodplain and routes which may be considered necessary as flood flow routes.

### **Summary**

- 3.41. The documents and policies outlined above highlight a substantial flood risk through Lewes and Newhaven. The SFRA, CFMP, and SMP consider flood risk from various forms and show that an integrated approach to the defence and re-development of Newhaven is required to prevent flooding of the existing and proposed development areas.

- 3.42. The CFMP considers fluvial flooding and proposes to defend the area through Newhaven, but proposes to allow flooding to occur on a more regular basis upstream between Lewes and Newhaven. This will result in more frequent overland flows from the north into Denton and the Eastbank of Newhaven as climate change occurs. In response to this increased flood risk, a flood wall has been proposed by the Environment Agency to prevent overland flows, and this or a similar scheme will be required to defend the existing development in Denton, as well as potential development of the Eastbank.
- 3.43. The SMP considers tidal flooding at Newhaven harbour and along the coast, but stops at the harbour / river interface and therefore neglects the risk of tidal flooding through Newhaven Port.
- 3.44. The SFRA presents results of combined fluvial and tidal modelling which show large scale flooding of Denton and the Eastbank of Newhaven in the existing scenario. Relevant extracts from the SFRA have been included in Appendix A. The SFRA demonstrates clearly that the Eastbank will be increasingly left unprotected against tidal flooding events.
- 3.45. A more holistic assessment of the flood risk within the town from both fluvial and tidal sources is required in order to ensure the effective management of risk into the future. The Strategic Exception Test presented herein considers the combined flood risk and presents potential mitigation measures which would ensure the safety of development and existing properties where possible.

#### 4.0 NEWHAVEN MASTERPLAN OPTIONS

- 4.1. The preceding sections of this report outline the flood risks and mechanisms through Newhaven and the surrounding area.
- 4.2. The SFRA shows that the majority of Newhaven, including Denton and the Eastbank will be at increasing risk of flooding by a combination of tidal and fluvial flooding. Modelling shows flooding in all return periods with the flood defences as existing.
- 4.3. The CFMP and SMP considered fluvial and tidal flood risk respectively but did not consider the link between the two and the area of Newhaven port which will be affected by a combination of both.
- 4.4. It is clear that in the absence of any formal flood defences on the Eastbank if no action is taken and improvements made to the flood defences through the town then flooding will affect large parts of the Eastbank and a high number of existing properties. The SFRA demonstrates that the frequency, nature, and impacts of flooding will only increase as climate change occurs.
- 4.5. Large scale development of the Eastbank represents a major (and perhaps the only) realistic means of funding investment into new flood defence infrastructure to provide protection to Denton and other large areas currently at risk. Development needs to be planned from the earliest stage to direct and guide developers to a flood risk management strategy that can, in part, resolve the Eastbank flooding issues.
- 4.6. Newhaven Strategic Network, in partnership with BBP Regeneration, has prepared a number of masterplan options for the regeneration of Newhaven. Potential development sites have been identified and within four options have been presented with varying levels of development density and combinations of sites.
- 4.7. The following section describes the masterplan options and shows the sites included in each.

### Option 1

- 4.8. Option 1 details an existing 'reference case', against which the following options can be compared. Option 1 describes the area as it currently is and is therefore not detailed further in this report in terms of application of the Exception Test.

## Option 2a

- 4.9. Development proposals presented in Option 2a include all identified potential development sites at high density (2008 levels).
- 4.10. Table 1 below details the composition of the sites which make up Option 2a, and shows the proposed development densities at each site.
- 4.11. The proposed development areas which make up Option 2a are shown on drawing GIS065 overleaf.
- 4.12. Option 2a includes proposed development of all of the potential development sites and offers the highest density of development across the sites. This therefore offers the most potential in terms of meeting the Lewes District housing target within the South East Plan.

Table 1: Masterplan Option 2a site composition

Option 2a	Area (ha)	Residential Units	Retail A1 / A3 (sq m)	Retail Food (sq m)	B1 (sq m)	B2 (sq m)
North quay	10.1	741	0	0	6,632	3,316
Railway Quay	1.16	116	4,000	0	1,500	0
Eastbank	12.81	611	250	0	14,653	1,235
Eastbank (River / NPP)	3.14	314	0	0	0	0
Port	5.9	0	0	0	0	0
Eastside (Avalon Newhaven LLP)	0.0	300	65 bed hotel, pub & rest	3,717	0	1,822
Robinson Road	0.28	21	708	0	708	0
Town Centre North	1.21	23	160 (library)	1,000	2,720	0
Town Centre South	1.53	61	2,191	0	4,813	0
Oakdene Phase 3	2.02	202	1,000	0	0	0
Quarry Industrial Estate	4.25	213	0	0	0	0
Meeching Quarry	9.0	315	250	0	0	0
Harbour Heights	15.0	525	250	0	0	0
<b>Total</b>	<b>66</b>	<b>3,442</b>	<b>8,649</b>	<b>4,717</b>	<b>31,026</b>	<b>6,373</b>